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[54] SYSTEM AND METHOD TO DETECT ANOMALIES IN A STEEL WIRE ROPE (SWR) OF AN ELEVATOR BASED ON
CHANGES IN RAW MAGNETIC FLUX LEAKAGE (MFL) DATA
基於磁通量洩漏原始數據變化的電梯鋼絲繩異常檢測系統及方法

[57] The present invention teaches a system (10) to detect anomalies in a steel wire rope (SWR) of an elevator based on changes in raw magnetic flux leakage (MFL) data, the system comprises: at least one MFL signals sensor placed on a targeted SWR of the elevator; a pre-processing module (14) configured to process the MFL data; at least one pre-trained deep learning neural network model (16) configured to train the processed data and generate outputs (18); and a feedback module configured to record and feed the outputs back into the at least one pre-trained deep learning neural network model (16) for parameters updates and re-training and its method thereof.

本發明教導了一種基於磁通量洩漏原始數據(MFL)變化的電梯鋼絲繩(SWR)異常檢測系統(10)，系統包括：至少一個放置在電梯的目標 SWR 上的 MFL 信號傳感器；預處理模塊(14)，被配置為對 MFL 數據進行處理；至少一個預訓練的深度學習

神經網絡模型(16)，被配置為訓練處理後的數據並生成輸出(18)；及反饋模塊，被配置為記錄輸出並將其反饋到至少一個預訓練的深度學習神經網絡模型(16)中以進行參數更新和再訓練及其方法。

